

**CAPSTONE PROJECT II**

CMU-SE 451

**USER STORY**

Version 1.0

Date: March 5th, 2021

**FACIAL IDENTIFICATION MATCHING**

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1. **Introduction**

* In the field of software development, User Story (User Stories) is one or more sentences describing natural language (not technical language) or business language of the end user or system user to record what the user needs to do or not to do as part of their job or task. User stories are used in methods like Agile software development as the basis for determining the functions of the system are business development and create favorable conditions for requirements management. Help yourself to know the “who”, “what” and “why” in a simple request, short, often only limited by what details can be written on a piece of paper notes, small scrap paper.
* User story is written by business users as the primary way users because they understand most of the process, workflow and functionality of the system should be working now. User story can also be written by developer to express non-functional requirements (such as security, performance, quality)
  1. **Document Overview**
  + This document provides a user story and goal-oriented view of the “Facial Identification Matchingweb application” project which delivers several key project benefits below:
* It helps answer the question “What does this project do?” for the business, project sponsors, developers and architects including clearly defining scope.
* It supports to define target and future state architectures.
* It helps understand required capabilities to support a project.
* It provides a meaningful resource which can be used in conversation between the business and architecture team.
  1. **User Needs**

Customer need FIM system that can handle the following issues:

* Assists in identifying criminals' faces.
* Identify the basic information of a person.
* Identifying a person after some traits have changed.
* Compare each face was photographed with each face in profile crime data.

1. **User Story of “Facial Identification Matching web application” System**
   1. **US01 – Login**

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| --- | --- |
| **As an** **Admin**  **I want to** login into the system **so that I** can use the system with my role | |
| **Login** | **Actor: Admin** |
| **Acceptance Criteria**   * *Given I’m in the role of admin* * *When I navigate to the Login page* * *Then I fill in the “Username” field with my username* * *When I fill in the “Username” and “Password” fields with my authentication credentials* * *And I click the Sign-In button* * *Then the system signs me on the Management page”* * *And the system shows my account name at the top-right corner on the Management page* | |

* 1. **US02 – Logout**

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| --- | --- |
| **As an** **Admin**  **I want to** log out of the system **so that** I can stop using the system. I can log in later when I want to use the system next time. | |
| **Logout** | **Actor: Admin** |
| **Acceptance Criteria**   * *Given I’m in the role of signed-in admin* * *When I select the “Logout” button* * *Then the system navigates me to the Login page* | |

* 1. **US03 - Add criminal record**

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| --- | --- |
| **As an** **Admin**  **I want to** add the criminal record **so that I** can append the criminal record into the database. | |
| **Add criminal record** | **Actor: Admin** |
| **Acceptance Criteria**   * *Given I’m in the role of admin* * *When I have successfully logged in to the admin account* * *Then I navigate to the Admin page* * *Next, I select the “Add” button* * *And, the admin inputs all information to add the criminal record* * *Then I select the “Add” button* * *And the system saves criminal information in a database* | |

* 1. **US04 - Update criminal record**

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| --- | --- |
| **As an** **Admin**  **I want to** update the criminal record **so that I** can amend the newest information on the criminal record into the database. | |
| **Update criminal record** | **Actor: Admin** |
| **Acceptance Criteria**   * *Given I’m in the role of admin* * *When I have successfully logged in to the admin account* * *Then I navigate to the Admin page* * *Next, I select the “Update” button* * *And, the admin inputs information to update the criminal record* * *Then I select the “Update” button* * *And the system updates criminal information in a database* | |

* 1. **US05 - Delete criminal record**

|  |  |
| --- | --- |
| **As an** **Admin**  **I want to** delete the criminal record **so that I** can remove the criminal record in the database. | |
| **Delete criminal record** | **Actor: Admin** |
| **Acceptance Criteria**   * *Given I’m in the role of admin* * *When I have successfully logged in to the admin account* * *Then I navigate to the Admin page* * *When I select the “Delete” button* * *Next, I select the “Yes” button* * *And the system deletes criminal information in a database* | |

* 1. **US06 - Welcome page**

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| --- | --- |
| **As a** **User**  **I want to** see the welcome page **so that I** can see the project information. | |
| **Welcome page** | **Actor: User** |
| **Acceptance Criteria**   * *Given I’m in the role of guest user* * *When I access to Welcome page* * *Then the system shows the introduction about the purpose of the project* * *When I scroll down the page* * *And then the system shows the benefits of the project* | |

* 1. **US07 - Application information**

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| --- | --- |
| **As a User**  **I want to** show the application information page **so that** I can see the application information | |
| **Application information** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I access to Home page* * *Then the system shows the introduction about the purpose of the application* * *When I scroll down the page* * *And then the system shows the benefits of the application, the technologies that have been used sequentially* | |

* 1. **US08 - Product experience page**

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| --- | --- |
| **As a User**  **I want to** display the system functions page **so that** I can use all the functions that the system has. | |
| **Product Experience Page** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Welcome page* * *Then I select the “Product Experience” button* * *Then the system navigates me to the Product Experience page* * *And the functions I can experience will be displayed on the Product Experience page* | |

* 1. **US09 - Upload from image or video file**

|  |  |
| --- | --- |
| **As a User**  **I want to** upload the photo or video from the gallery **so that** I can upload the photo or video from my computer | |
| **Upload from image or video file** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m the role of guest user* * *When I access to Product Experience page* * *Then I click on the “Upload image or video” button* * *And the system displays the folder window* * *Then I choose the image and click the “OK” button* * *And the system displays the image which has been chosen* | |

* 1. **US10 - Capture from the real-time video (webcam)**

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| **As a User**  **I want to** take a photo by using a webcam **so that** I can take a photo by using Webcam | |
| **Capture from the real-time video (webcam)** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m the role of guest user* * *When I access to Product Experience page* * *Then I click on the “Using webcam” button* * *And the system displays a “Access camera permission” message* * *Then I click the “OK” button* * *And the system activates the webcam and displays the real-time video which is recorded by the webcam* | |

* 1. **US11 - Determine face from image**

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| --- | --- |
| **As a** **User**  **I want to** see that the face has been identified by the square **so that** I can know that face was identified for analysis. | |
| **Determine face from the image** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Product Experience page* * *And when I choose the image successfully* * *Then the image is upload and display in the window with the face has been identified by the square* | |

* 1. **US12 - Determine a person's age**

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| **As a User**  **I want to** see the person's age **so that** I can know the age of the person in the image or video. | |
| **Determine a person's age** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Product Experience page* * *Then the face has been successfully identified* * *And then the system shows the age of the person automatically beside the image* | |

* 1. **US13 - Determine a person's gender**

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| **As a** **User**  **I want to** see the person's gender **so that** Ican know the gender of the person in the image or video. | |
| **Determine a person's gender** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Product Experience page* * *And when I choose the image successfully* * *When the face has been successfully identified* * *Then the system shows the gender of the person automatically beside the image* | |

* 1. **US14 - Determine a person's name**

|  |  |
| --- | --- |
| **As a** **User**  **I want to** see the person's name **so that** I can know the name of the person in the image or video. | |
| **Determine a person’s name** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Product Experience page* * *And when the face has been successfully identified* * *Then the system automatically displays the person's name next to the image* | |

* 1. **US15 - Compare faces**

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| --- | --- |
| **As a** **User**  **I want to** compare faces with each other **so that** I can compare the image that is uploaded with another face. | |
| **Compare faces** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Product Experience page* * *And when I choose the image successfully* * *And when the face has been successfully identified* * *Then the system analyzes new data with the existing one to do the next function* | |

* 1. **US16 - Show similar faces**

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| **As a** **User**  **I want to** see all of the highly similar faces **so that** I cansee all of the faces that have a highly similar ratio to my face. | |
| **Show similar faces** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Product Experience page* * *And when I choose the image successfully* * *When the face has been successfully identified* * *And when the system analyzes that image successfully* * *Then the system automatically displays all of the faces which have a highly similar proportion below the image* | |

* 1. **US17 - Display similarity ratios**

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| --- | --- |
| **As a User**  **I want to** see how many the similarities **so that** I can see how many the similarities ratio between faces | |
| **Display similarity ratios** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Product Experience page* * *And when the face has been successfully identified* * *Then the system analyzes new data with the existed ones* * *And then the system shows the proportion matched between the new face and the old ones* | |

* 1. **US18 - Point out the difference in the face which changes**

|  |  |
| --- | --- |
| **As a User**  **I want to** see the difference in the face which changes **so that** I can see the difference in the face which changes. | |
| **Point out the difference in the face which changes** | **Actor: User** |
| **Acceptance Criteria**   * *Given that I’m in the role of guest user* * *When I navigate to the Product Experience page* * *And when the face has been successful identification* * *Then the system analyzes new data with the existed ones* * *And then the system displays the distinctive features using dots on the faces of the photos* | |